DIAGNOSIS OF EQUIPMENT FAILURES USING AN INTEGRATED APPROACH OF CASE BASED REASONING AND RELIABILITY ANALYSIS

ABSTRACT OF THE DISCLOSURE

5 Equipment failures are diagnosed using an integrated approach of case-based reasoning (CBR) and statistical reliability analysis. The method outputs a single list of suggested failed components, ranked by an overall probability of failure, and their associated past solutions from the case base. The overall probability of failure is calculated using the combined logic of case based

10 reasoning and statistical reliability analysis. The method is typically used in a real-time decision support system to aid equipment diagnosis by a maintenance technician working in the field.